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(71) Applicant (for all designated States except US): THOMSON LICENSING S.A. [FR/FR]; 46 Quai A. Le Gallo, F-92100 Boulogne-Billancourt (FR).

(72) Inventors; and

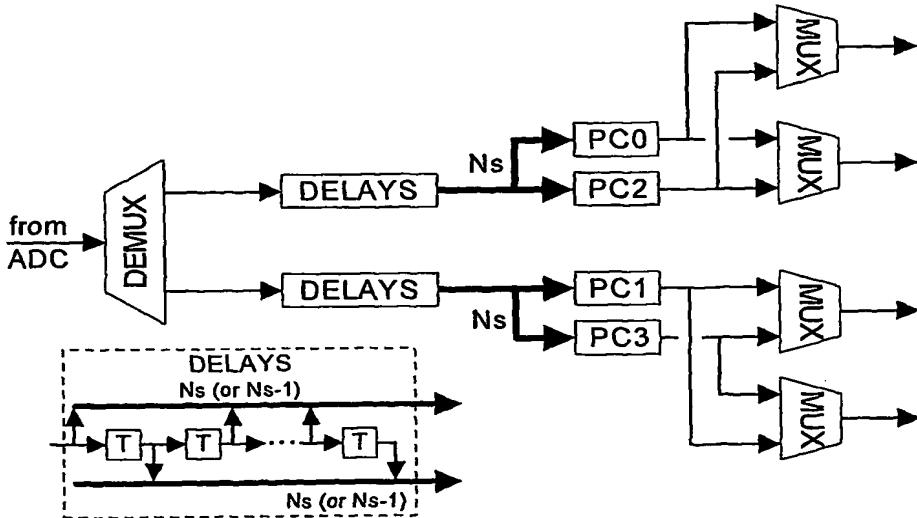
(75) Inventors/Applicants (for US only): LO MUZIO, Pierluigi [IT/DE]; Pforzheimer Str. 37, 78048 Villingen-Schwenningen (DE). KABUTZ, Marten [ZA/DE]; Tirolerstr. 23, 78052 Villingen-Schwenningen (DE). SCHEMMANN, Heinrich [DE/DE]; Danziger Str. 17, 78052 Villingen-Schwenningen (DE).

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(54) Title: DIFFERENTIAL PHASE DETECTOR



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(57) Abstract: The present invention relates to a full-digital implementation of a differential phase detector and to an interpolator for such a differential phase detector. According to the invention a differential phase detector for generating a tracking error signal from the digitized signals (A, B, C, D) of four photodetectors, having a multiplexer for time multiplexing the digitized signals (A, B, C, D), includes a demultiplexer / interpolator for synchronizing the samples from the time multiplexed digitized signals (A, B, C, D). The demultiplexer / interpolator favorably receives a four signal time multiplex and generates four channels at half the speed of the time multiplex.



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